



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,426	09/08/2003	Adam J. Ferrari	109878.132 US1	9037
28089	7590	05/03/2006	EXAMINER	
WILMER CUTLER PICKERING HALE AND DORR LLP			LU, CHARLES EDWARD	
399 PARK AVENUE			ART UNIT	
NEW YORK, NY 10022			PAPER NUMBER	
			2163	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/657,426	FERRARI ET AL.	
	Examiner	Art Unit	
	Charles E. Lu	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

IDS Attached

3/20/2006 (3 pages) ✓	12/22/2004 (1 page) ✓	12/5/2003 (1 page) ✓
9/23/2005 (1 page) ✓	8/26/2004 (1 page) ✓	
3/4/2005 (1 page) ✓	7/19/2004 (3 pages) ✓	

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>See above</u> ↑ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Claims 1-40 have been submitted for examination.
2. Claims 1-40 have been rejected.

Drawings

3. The drawing is objected to because of the following informalities:

The drawing must show every feature of the invention specified in the claims. Therefore, the "semantic approaches," "pruning", etc. from the claims must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The specification is objected to because of the following informalities:

The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the prior art. It is recommended that the title should reflect the gist of the present invention.

There is a typographical error on p. 5, l. 16.

There is a typographical error on p. 10, l. 4.

There should be a period after the word "database" on p. 18, l. 16.

Appropriate corrections are required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to independent claim 1, the method is drawn to an abstract idea (e.g., identifying expressions, providing approaches, associating data, and determining a

score). The claim should be a practical application of the abstract idea to produce a useful, concrete, and tangible result.

Furthermore, in claim 1, the claimed recitation of a use in line 11, "using the database", without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Independent claims 11, 19, 29, and 37-40 are rejected under 35 U.S.C. 101 for similar reasons as claim 1.

All dependent claims are rejected because they do not cure the deficiencies of their parent claim(s).

The art rejection of claims 1-40 is applied in anticipation of Applicants amending the claims to overcome the rejection under 35 U.S.C. 101, discussed above.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 13-14 and 31-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a

Art Unit: 2163

way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claims 13 and 31, line 3, "maximal result set."

Claims 14 and 32 are rejected because they depend from a rejected parent claim.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 provides for the use of a database on line 11, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Independent claims 11, 19, 29, and 37-40 are rejected under 35 U.S.C. 112, second paragraph, for similar reasons as claim 1. For example, in **claim 38**, "use" of a contextual score is recited.

All dependent claims are rejected because they incorporate the deficiencies of their parent claim(s).

Dependent claims with similar "use" limitations (e.g., claim 18, 36) are rejected based on similar reasoning as seen above.

Art Unit: 2163

As to claim 7, line 2, "the number of terms...result set" lacks antecedent basis.

As to claims 16-17, line 3, "the potential...interpretations" lack antecedent basis.

As to claim 18, line 3, "the context-independent scores" lack antecedent basis.

Claims 34-36 are rejected for similar reasons as claims 16-18.

The broadest reasonable interpretation of the above terms in light of the specification has been given to the claims. Art rejection of the above claims is applied as best understood in light of the rejection under 35 U.S.C. 112, second paragraph, discussed above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-11, 19-29, and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schabes et al (U.S. Patent 6,424,983) in view of Woods (U.S. Patent 5,724,571).

As to claim 1, Schabes teaches a method of interpreting a query (fig. 23, #S2301) formed of at least a first term and a second term (col. 10, ll. 56-59) with respect to a database of items ("source," fig. 23, #S2304), comprising:

Identifying at least one candidate single-term interpretation for the first term (alternate spelling) and identifying at least one candidate single-term interpretation for the second term ("misspelled words," col. 10, ll. 56-58);

Identifying one or more candidate multiple-term interpretations (sentences, fig. 16), wherein a candidate multiple-term interpretation is a combination of candidate single-term interpretations (in fig. 16, each sentence interpretation is constructed by combining words to form a path through the FSM); and

Schabes does not expressly teach determining a contextual score for each candidate multiple-term interpretation using the database, and providing a plurality of semantic approaches for associating one or more candidate multiple term interpretations with items in a database, including treating a candidate multiple term interpretation as a conjunction, disjunction, and a partial match approach.

However, Woods discloses scoring hits in the database by considering term proximity in a hit document based on the query (col. 6, ll. 18-23), thus producing a contextual score for each query. Woods also provides a plurality of semantic approaches (fig. 4).

Woods further teaches wherein determining a contextual score for each candidate multiple-term interpretation includes treating the candidate multiple-term interpretations as a conjunction and/or a disjunction, and considering partial matches of the candidate multiple-term interpretations. If all words are not matched in the hit document, a penalty will result (col. 6, ll. 59-62). Thus, if no penalty occurs, all words are matched and the query is treated as a conjunction. If a penalty is assigned to the hit

Art Unit: 2163

document for matching some, but not all words (col. 6, l. 60), the query is treated as a disjunction. If a penalty is assigned for a missing word(s), a partial match of the query is considered. Thus, a conjunctive, disjunctive, and partial match approach are all implemented.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of Schabes with the teachings of Woods, therefore determining a contextual score for each multiple term interpretation, and using a conjunctive, disjunctive, and partial match approach, since one of ordinary skill in the art would have been motivated to increase search intelligence (Woods, col. 1, ll. 38-50).

Claims 2-5 have already been addressed with respect to the rejection for claim 1 above.

As to claim 6, claim 7, and claim 8, Woods, in the combination of Schabes and Woods, teaches wherein for at least one candidate multiple term interpretation the contextual score incorporates information about the semantic approach that is used (e.g., see the various scoring in fig. 4 and related text), the incorporating including using a measure of the number of terms in the candidate multiple term interpretation that are in an associated result set (e.g., proximity measures, col. 6, ll. 16-23 and related text). Proximity ranking is a dominant factor in determining a contextual score, as seen in Woods (col. 6, l. 16).

As to claim 9, Schabes and Woods do not expressly teach using a first of the semantic approaches for identifying an associated result set for a first multiple term

Art Unit: 2163

interpretation and a second of the semantic approaches for identifying a result set for a second multiple term interpretation.

However, Schabes teaches multiple term interpretations, as discussed above. Furthermore, Woods teaches semantic approaches, as seen in fig. 4, and the related text. Furthermore, Woods suggests that the order of semantic approaches can change (col. 6, ll. 8-13), because the performance of the procedures can occur in many different orders.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schabes and Woods with the above teachings, such that different multiple term interpretations are processed using different order of criteria, thus accomplishing the claimed invention. The motivation would have been to adapt to the user's requirements for programming, or to provide any performance enhancement by performing procedures in a different order, as known to one of ordinary skill in the art.

As to claim 10, Schabes and Woods as modified above teaches "wherein determining...multiple-term interpretation", as discussed above.

Schabes and Woods do not expressly teach selecting between the first or second of the semantic approaches for determining a contextual score.

Because Woods suggests that the order of semantic approaches can change (col. 6, ll. 8-13), because the performance of the procedures can be arranged to occur in many different orders, as discussed above. Therefore, a first and a second of the semantic approaches can be available.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schabes and Woods with the above teachings, such that a first or second of the semantic approaches is selected for determining the contextual score for the first candidate multiple term interpretation. The motivation, as previously stated, would also have been to adapt to the user's requirements for programming, or to provide any performance enhancement by performing procedures in a different order, as known to one of ordinary skill in the art.

As to claim 11, Schabes teaches a method of interpreting a query (fig. 23, #S2301) formed of at least a first term and a second term (col. 10, ll. 56-59) with respect to a database of items ("source," fig. 23, #S2304), comprising:

Identifying at least one candidate single-term interpretation for the first term (alternate spelling) and identifying at least one candidate single-term interpretation for the second term ("misspelled words," col. 10, ll. 56-58);

Identifying one or more candidate multiple-term interpretations (sentences, fig. 16), wherein a candidate multiple-term interpretation is a combination of candidate single-term interpretations (in fig. 16, each sentence interpretation is constructed by combining words to form a path through the FSM) that have not been pruned;

Pruning the candidate single term interpretations (selecting alternative word with the highest rank prunes out other alternative words, e.g., col. 11, ll. 9-15);

Schabes does not expressly teach determining a contextual score for each candidate multiple-term interpretation using the database.

However, Woods discloses scoring hits in the database by considering term proximity in a hit document based on the query (col. 6, ll. 18-23), thus producing a contextual score for each query.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of Schabes with the teachings of Woods, therefore determining a contextual score for each multiple term interpretation, since one would have been motivated to increase search intelligence (Woods, col. 1, ll. 38-50).

Claims 19-28 are drawn to similar subject matter as claims 1-10. Therefore, claims 19-28 are rejected for similar reasoning as claims 1-10.

Claim 29 is drawn to similar subject matter as claim 11. Therefore, claim 29 is rejected for similar reasoning as claim 11.

As to claim 37, Schabes teaches a method of interpreting a query (fig. 23, #S2301) formed of at least a first term and a second term (col. 10, ll. 56-59) with respect to a database of items ("source," fig. 23, #S2304), comprising:

Identifying at least one candidate single-term interpretation for the first term (alternate spelling) and identifying at least one candidate single-term interpretation for the second term ("misspelled words," col. 10, ll. 56-58);

Determining a context-independent score for each candidate single-term interpretation (a weight given to an alternate spelling, col. 9, ll. 21-25, col. 11, ll. 25-28 and fig. 4, #52);

Identifying one or more candidate multiple-term interpretations (sentences, fig. 16), wherein a candidate multiple-term interpretation is a combination of candidate

single-term interpretations (in fig. 16, each sentence interpretation is constructed by combining words to form a path through the FSM); and

Determining a combined context-independent score (weight) for each candidate multiple-term interpretation (sentence) using the context-independent score for each candidate single-term interpretation (weight for an alternative spelling) in the multiple-term interpretation (sum of all the weighted words, col. 22, ll. 13-15);

Schabes does not expressly teach providing a plurality of semantic approaches for associating the one or more candidate multiple term interpretations with items in the database.

However, Woods teaches providing a plurality of semantic approaches for associating the one or more candidate multiple term interpretations with items in the database (e.g., see fig. 4 and related text).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schabes with the above teachings, such that semantic approaches as described is implemented, and each multiple term interpretation can be subjected to the semantic approaches. The motivation would have been to allow for flexible ranking of retrieved text, as taught by Woods (col. 6, ll. 13-16).

Schabes and Woods do not expressly teach determining a contextual score for each candidate multiple-term interpretation using the database and a semantic approach.

However, Woods discloses scoring hits in the database by considering term proximity in a hit document based on the query (e.g., col. 6, ll. 18-23); thus producing a contextual score for each query based on a semantic approach.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of Schabes and Woods with the above teachings, therefore determining a contextual score for each sentence, since one would have been motivated to increase search intelligence (Woods, col. 1, ll. 38-50).

Schabes and Woods further teach incorporating information about the semantic approach that is used for the candidate multiple term interpretation, as seen in fig. 4 of Woods, because the semantic approach contributes to the score.

Schabes and Woods do not expressly teach determining an overall score for each candidate multiple-term interpretation by using the contextual score and the combined context-independent score for the multiple-term interpretation.

However, Schabes discloses wherein two scores are combined to form an overall score. In col. 20, ll. 24-34, the weights of input FSM represent the first score, and the weights of grammar FSM represent the second score. The two weights are combined using the weights application module to form an overall score (fig. 13, #135 and figs. 17-18).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of Schabes and Woods with the additional teachings of Schabes, therefore producing an overall score from a combination of the context-independent and contextual scores. The motivation would have been to provide

Art Unit: 2163

a more effective measure of relevance than any one of the scores alone, as taught by Schabes.

As to claim 38, Schabes teaches a method of interpreting a query (fig. 23, #S2301) formed of at least a first term and a second term (col. 10, ll. 56-59) with respect to a database of items ("source," fig. 23, #S2304), comprising:

Identifying at least one candidate single-term interpretation for the first term (alternate spelling) and identifying at least one candidate single-term interpretation for the second term ("misspelled words," col. 10, ll. 56-58);

Determining a context-independent score for each candidate single-term interpretation (a weight given to an alternate spelling, col. 9, ll. 21-25, col. 11, ll. 25-28 and fig. 4, #52);

Identifying one or more candidate multiple-term interpretations (sentences, fig. 16), wherein a candidate multiple-term interpretation is a combination of candidate single-term interpretations (in fig. 16, each sentence interpretation is constructed by combining words to form a path through the FSM) that have not been pruned;

Pruning the candidate single term interpretations (selecting alternative word with the highest rank prunes out other alternative words, e.g., col. 11, ll. 9-15);

Determining a combined context-independent score (weight) for each candidate multiple-term interpretation (sentence) using the context-independent score for each candidate single-term interpretation (weight for an alternative spelling) in the multiple-term interpretation (sum of all the weighted words, col. 22, ll. 13-15);

Schabes and Woods do not expressly teach determining a contextual score for each candidate multiple-term interpretation using the database.

However, Woods discloses scoring hits in the database by considering term proximity in a hit document based on the query (e.g., col. 6, ll. 18-23), thus producing a contextual score for each query using a database.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of Schabes and Woods with the above teachings, therefore determining a contextual score for each sentence, since one would have been motivated to increase search intelligence (Woods, col. 1, ll. 38-50).

Schabes and Woods do not expressly teach determining an overall score for each candidate multiple-term interpretation by using the contextual score and the combined context-independent score for the multiple-term interpretation.

However, Schabes discloses wherein two scores are combined to form an overall score. In col. 20, ll. 24-34, the weights of input FSM represent the first score, and the weights of grammar FSM represent the second score. The two weights are combined using the weights application module to form an overall score (fig. 13, #135 and figs. 17-18).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of Schabes and Woods with the additional teachings of Schabes, therefore producing an overall score from a combination of the context-independent and contextual scores. The motivation would have been to provide

a more effective measure of relevance than any one of the scores alone, as taught by Schabes.

Claims 39-40 are drawn to similar subject matter as claims 37-38. Therefore, claims 39-40 are rejected for similar reasoning as claims 37-38.

10. Claims 12-18 and 30-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schabes et al (U.S. Patent 6,424,983) in view of Woods (U.S. Patent 5,724,571) further in view of Lizée et al (U.S. Patent 5,671,404).

As to claim 12, Schabes and Woods do not expressly teach wherein pruning includes eliminating each candidate single term interpretations to which insufficient items in the database correspond.

However, Lizée teaches eliminating (pruning) single term interpretations (conditions) that correspond insufficiently to the number of resulting database items (see fig. 1-2, col. 5, ll. 26-30, and related text).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schabes and Woods with the above teachings, such that additionally, single term interpretations are pruned when they correspond to insufficient items in the database. The motivation would have been to achieve greater speed, and to minimize interaction between database and user, as taught by Lizée (Abstract, col. 2, ll. 50-57).

As to claim 13 and claim 14, Lizée, in combination with Schabes and Woods, teaches wherein eliminating each candidate single term interpretation comprises generating a query that identifies a maximal result set (e.g., the entire database to be

queried) of the single term interpretations (see fig. 2), evaluating an intersection query (e.g., C1 & C2, fig. 2) for each candidate single term interpretation (e.g., C1, C2) with the maximal result set (the database) to identify results for the intersection query (in this case, the number of results is zero), and eliminating each candidate single term interpretation for which the intersection query yields fewer results than a threshold of 1 (in fig. 2, single term C2 is eliminated because the intersection query yields zero results).

As to claim 15, Lizee in combination with Schabes and Woods further teaches wherein pruning includes determining a maximal result set, as discussed above with respect to the elimination of terms.

As to claim 16 and claim 17, Lizee in combination with Schabes and Woods further teaches wherein the eliminating includes identifying results of a union of all of the potential candidate multiple term interpretations (see fig. 1-2) and eliminating single term interpretations that do not have associated items in the results of the union (in fig. 2, single terms C2 and C5 do not have associated items). If a term returns zero items (as seen in fig. 1-2), the term returns fewer associated items than a threshold of one and is eliminated.

As to claim 18, Lizee in combination with Schabes and woods teaches the claimed subject matter. Determining how many results a single term interpretation returns is determining a context independent score. As discussed above, if no results are returned, the score is zero, and the term is eliminated (pruned).

Art Unit: 2163

Claims 30-36 are drawn to similar subject matter as claims 12-18. Therefore, claims 30-36 are rejected for similar reasons as claims 12-18.

Conclusion

11. The following prior art cited on the PTO-892 form, not relied upon, is considered pertinent to applicant's disclosure:

Kravets et al. US 6,363,377. "Search Data Processor."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Lu whose telephone number is (571) 272-8594. The examiner can normally be reached on 8:30 - 5:00; M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DON WONG
SUPERVISORY PATENT EXAMINER

CL
Assistant Examiner
AU 2163
4/27/2006